

**AMENDMENTS TO THE CLAIMS**

1. (Currently Amended) A method for dynamically configuring a mobile node comprising:  
issuing a first Dynamic Host Control Protocol ("DHCP") request;  
receiving an address for a first home agent in response to the first DHCP request;  
registering with the first home agent;  
examining a registration reply from the first home agent to identify an extension, wherein the extension includes an internal registration reply extension or an external registration reply extension provided by the home agent;  
determining dynamically from the extension whether the mobile node is on one of an internal network and an external network; and  
roaming the mobile node within and/or between the internal network and the external network  
issuing a second DHCP request;  
receiving an address for a second home agent in response to the second DHCP request;  
registering with the address for the first home agent; and  
registering with the second home agent if the registration attempt to the first home agent fails.
2. (Previously Presented) The method according to claim 1 wherein the first home agent comprises one of an internal home agent and an external home agent.
3. (Previously Presented) The method according to claim 1 wherein the mobile node is on the internal network if the home agent address includes the internal registration reply extension and on the external network if the home agent address includes the external registration reply extension.
4. (Original) The method according to claim 1 further comprising receiving an address for a default Virtual Private Network ("VPN") gateway and an address for a default home agent in response to the first DHCP request.
5. (Previously Presented) The method according to claim 4 wherein the mobile node is on the internal network and the address of the default home agent includes an address of an external

home agent, the method further comprising storing the address for the default VPN gateway and the address for the external home agent.

6. (Canceled).

7. (Currently Amended) The method according to claim 61 wherein the second home agent comprises an external home agent.

8. (Previously Presented) The method according to claim 4 wherein the mobile node is on the external network, the address for the default home agent includes an address of an internal home agent, and the method further comprises establishing a secure connection with the default VPN gateway.

9. (Original) The method according to claim 8 further comprising registering the mobile node with the internal home agent on the internal network via the secure connection.

10. (Currently Amended) A system comprising:

a mobile node capable of issuing a first Dynamic Host Control Protocol ("DHCP") request;

a first home agent coupled to the mobile node, the first home agent capable of issuing a registration reply including an extension in response to a registration request from the mobile node; and

a DHCP server coupled to the mobile node and the first home agent, the DHCP server capable of providing a DHCP reply in response to the DHCP request from the mobile node, the DHCP reply including an address for the first home agent, the mobile node further capable of registering with the first home agent, examining the registration reply from the first home agent to identify the extension, wherein the extension includes an internal registration reply extension or an external registration reply extension provided by the home agent and determining dynamically from the extension whether the mobile node is on one of an internal network and an external network, wherein the mobile node is capable of roaming within and/or between the internal network and the external network; and

a second home agent coupled to the mobile node and the DHCP server, the mobile node capable of roaming from the internal network to the external network and issuing a second

DHCP request to the DHCP server, the DHCP server capable of issuing an address for the second home agent in response to the second DHCP request, and the mobile node is further capable of registering with the first home agent, and registering with the second home agent if the registration attempt to the first home agent fails.

11. (Original) The system according to claim 10 wherein the first home agent is one of an internal home agent and an external home agent, and the extension includes one of an internal registration reply extension and an external registration reply extension.

12. (Previously Presented) The system according to claim 11 wherein the mobile node is on the internal network if the home agent address includes the internal registration reply extension and on the external network if the home agent address includes the external registration reply extension.

13. (Original) The system according to claim 10 wherein the DHCP reply in response to the first DHCP request further includes an address for a default Virtual Private Network ("VPN") gateway and an address for a default home agent.

14. (Previously Presented) The system according to claim 13 wherein the mobile node is on the internal network, the address of the default home agent includes an address of an external home agent and the mobile node is further capable of storing the address for the default VPN gateway and the address for the external home agent.

15. (Canceled).

16. (Currently Amended) The system according to claim ~~15~~<sup>10</sup> wherein the second home agent comprises an external home agent.

17. (Original) The system according to claim 13 wherein the mobile node is on the external network, the address for the default home agent is an address of an internal home agent, and the mobile node is further capable of establishing a secure connection with the default VPN gateway.

18. (Original) The system according to claim 17 wherein the mobile node is further capable of registering with the internal home agent on the internal network via the secure connection.

19. (Currently Amended) An article comprising a computer-readable medium comprising instructions that, when executed, cause a machine to:

issue a first Dynamic Host Control Protocol ("DHCP") request;

receive an address for a first home agent in response to the first DHCP request;

register with the first home agent;

examine a registration reply from the first home agent to identify an extension, wherein the extension includes an internal registration reply extension or an external registration reply extension provided by the home agent;

determine dynamically from the extension whether a mobile node is on one of an internal network and an external network; and

roaming the mobile node within and/or between the internal network and the external network

issue a second DHCP request;

receive an address for a second home agent in response to the second DHCP request;

register with the first home agent; and

register with the second home agent if the registration attempt to the home agent fails.

20. (Previously Presented) The article according to claim 19 wherein the first home agent comprises one of an internal home agent and an external home agent.

21. (Previously Presented) The article according to claim 20 wherein the mobile node is on the internal network if the home agent address includes the internal registration reply extension and on the external network if the home agent address includes the external registration reply extension.

22. (Original) The article according to claim 19 wherein the instructions, when executed by the machine, are further capable of causing the machine to receive an address for a default Virtual Private Network ("VPN") gateway and an address for a default home agent in response to the first DHCP request.

23. (Previously Presented) The article according to claim 22 wherein the machine is on the internal network, the address of the default home agent comprises an address of an external home agent, and the instructions when executed by the machine, are further capable of storing the address for the default VPN gateway and the address for the external home agent.

24. (Canceled).

25. (Currently Amended) The article according to claim 2419 wherein the second home agent comprises an external home agent.

26. (Previously Presented) The article according to claim 22 wherein the mobile node is on the external network, the address for the default home agent is an address of an internal home agent, and the instructions, when executed by the machine further cause the machine to establish a secure connection with the default VPN gateway.

27. (Original) The article according to claim 26 wherein the instructions, when executed by the machine, further cause the machine to register with the internal home agent on the internal network via the secure connection.

Claims 28-31 (Canceled).